

1. A transceiver for providing an interface between a camera and a fiber optic cable, the transceiver comprising:

5 a transmitter for coupling between the camera and the fiber optic cable, the transmitter adapted for converting an electrical information input signal received from the camera to an optical output signal;

a receiver for coupling between the fiber optic cable and the camera, the receiver adapted for converting an optical input signal received from the fiber optic cable to an electrical information output signal;

10 a housing for holding the transmitter and receiver, and adapted for mounting to the camera.

2. The transceiver of Claim 1 wherein the housing includes a first plate on a first side for mounting the housing to the camera and a second plate on a second side adapted for mounting the housing to a power source.

15 3. The transceiver of Claim 1 wherein the electrical information input signal includes a video signal.

4. The transceiver of Claim 1 wherein the electrical information input signal includes at least one audio signal.

20 5. The transceiver of Claim 1 wherein the electrical information input signal includes at least one data signal.

6. The transceiver of Claim 1 wherein the electrical information output signal includes a video signal.
7. The transceiver of Claim 1 wherein the electrical information output signal includes at least one audio signal.
- 5 8. The transceiver of Claim 1 wherein the electrical information output signal includes at least one data signal.
9. The transceiver of Claim 1 further comprising a wave division multiplexer adapted for coupling the optical output signal from the transmitter to the fiber optic cable and for coupling the optical input signal from the fiber optic cable to
10 the receiver.
10. The transceiver of Claim 1 wherein the electrical information input signal includes plural information signals received from the camera and wherein the transmitter includes a multiplexer for multiplexing the plural camera information signals to a multiplexed electrical input signal and an electrical-to-optical
15 converter for converting the multiplexed electrical input signal to the optical output signal.
11. The transceiver of Claim 10 wherein at least one of the plural camera information signals comprises an analog information signal and further comprising analog-to-digital converter circuitry for converting the analog
20 information signal to a digital information signal for input to the multiplexer.

12. The transceiver of Claim 1 wherein the receiver includes an optical-to-electrical converter that converts the optical input signal to a multiplexed electrical signal and a demultiplexer for demultiplexing the multiplexed electrical signal to plural remote information signals.
- 5 13. The transceiver of Claim 12 further comprising digital-to-analog converter circuitry for converting at least one of the plural remote information signals to an analog information signal.
14. Apparatus comprising:
a transmitter for converting electrical information input signals received
10 from a camera to an optical output signal; and
a housing for holding the transmitter, and adapted for mounting to a camera.
15. The apparatus of Claim 14 wherein the housing includes a first plate on a first side adapted for mounting to the camera and a second plate on a second side
15 adapted for mounting to a power source.
16. The apparatus of Claim 15 wherein the power is passed from the power source to the camera through the housing and is tapped off to supply power to the apparatus.
17. The apparatus of Claim 14 further comprising a receiver for converting an
20 optical input signal to electrical information output signals and wherein the housing is further adapted for holding the receiver.

18. A system comprising:

a camera-mountable optical transceiver for transmitting a downstream optical signal and for receiving an upstream optical signal;

5 a remote optical transceiver for transmitting the upstream optical signal and for receiving the downstream optical signal;

a fiber optic cable coupled between the camera-mountable optical transceiver and the remote optical transceiver for carrying the downstream and upstream optical signals.

10 19. The system of Claim 18 wherein the camera-mountable optical transceiver includes a housing having a first plate on a first side of the housing for mounting to the camera and a second plate on a second side of the housing for mounting to a power source.

15 20. The system of Claim 18 wherein the camera-mountable optical transceiver comprises:
a transmitter for coupling between a camera and the fiber optic cable, the transmitter adapted for converting an electrical information input signal received from the camera to the downstream optical signal; and

20 a receiver for coupling between the fiber optic cable and the camera, the receiver adapted for converting the upstream optical signal received from the fiber optic cable to an electrical information output signal.

21. The system of Claim 20 wherein the electrical information input and output signals include video signals.

22. The system of Claim 20 wherein the electrical information input and output signals include audio signals.

23. The system of Claim 20 wherein the electrical information input and output signals include data signals.
24. The system of Claim 18 wherein the remote optical transceiver comprises:
a transmitter for coupling between a remote camera control unit and the
5 fiber optic cable, the transmitter adapted for converting an electrical information input signal received from the remote camera control unit to the upstream optical signal; and
a receiver for coupling between the fiber optic cable and the camera control unit, the receiver adapted for converting the downstream optical signal
10 received from the fiber optic cable to an electrical information output signal.
25. The system of Claim 18 wherein the camera-mountable optical transceiver includes a connector cable for electrically connecting the optical transceiver to a camera and wherein the optical transceiver is adapted to select a camera-specific data signal type responsive to a connector cable option.
- 15 26. A transceiver for providing an interface between a video production facility and a fiber optic cable, the transceiver comprising:
a transmitter for coupling between the video production facility and the
fiber optic cable, the transmitter adapted for converting an electrical information
input signal received from the video production facility to an optical output
20 signal;
a receiver for coupling between the fiber optic cable and the video production facility, the receiver adapted for converting an optical input signal received from the fiber optic cable to an electrical information output signal;
wherein the electrical information input signal includes plural information
25 signals received from the video production facility and wherein the transmitter includes a multiplexer for multiplexing the plural information signals to a

multiplexed electrical input signal and an electrical-to-optical converter for converting the multiplexed electrical input signal to the optical output signal.

27. The transceiver of Claim 26 wherein the receiver includes an optical-to-electrical converter that converts the optical input signal to a multiplexed electrical signal and a demultiplexer for demultiplexing the multiplexed electrical signal to plural remote information signals.
- 5

11. The transceiver of Claim 10 wherein the receiver includes an optical-to-electrical converter that converts the optical input signal to a multiplexed electrical signal and a demultiplexer for demultiplexing the multiplexed electrical signal to plural remote information signals.